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United States Environmental Protection Agency Region 4





35TH AVENUE REMOVAL INVESTIGATION BIRMINGHAM, ALABAMA JEFF CROWLEY, ON-SCENE COORDINATOR

FIELD SAMPLING LOGBOOK

Book _/ of _

Inclusive Dates: 12/4/12 - 12/04/(2

Lis	st of Sampling Team i	in logbook:
Name	Initials	Organization/Duties
(h)	(6)	,Team Leader
(D)	(0)	

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Sampling Procedures and Methodology

Unless specified elsewhere in this logbook, all soil samples will be collected in accordance with the EPA Science and Ecosystem Division (SESD) Field Branches Quality System and Technical Procedures (FBQSTP) Soil Sampling (SESDPROC-300-R2) based on the following design.

The total number of 5-point composite surface soil samples (0-4 inches below ground surface) to be collected from each property will be based on the lot size as follows:

- For residential properties with a total parcel lot size equal to or less than (≤) 5,000 square feet the front yard and back yards of each property. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may also be collected from the side yard. Aliquots will be collected away from influences with drip lines and burn areas in a five dice configuration (each of the four corners and the center).
- For residential properties with a total parcel lot size greater than (>) 5,000 square feet and ≤ ¼-acre the property should be divided into two roughly equal surface areas. If the property has a substantial side yard (primarily corner lots), then one composite soil sample may be collected from the side yard with the remainder of the property being divided into two roughly equal surface areas. Aliquots will be collected away from influences including drip lines and burn areas with reasonably equal spacing between aliquots.
- Residential properties over ¼-acre in parcel lot size will be divided into ¼-acre sections. When dividing any such property with a substantial side yard (primarily corner lots), one composite soil sample may be collected from the side yard. Aliquots will be collected away from influences including drip lines and burn areas in a five dice configuration, if possible, with reasonably equal spacing between aliquots.

Grab surface soil samples will be collected from apparent exposure pathways where active play sets are located.

Three-point composite surface soil samples will be collected from distinct vegetable gardens from each residential property.

Samples shall not be collected under paved areas or under stationary fixed structures.

Grab sediment samples will be collected in accordance with EPA SESD FBSTP Sediment Sampling (SESDPROC-200-R2) from any surface water drainage pathways located on individual properties, as directed by the OSC, and in and along the banks of the 34th Street North Ditch.

Each surface soil or sediment sample should be homogenized in a stainless steel bowl. One 8-ounce jar will be filled and the remaining sample material will be placed in zip-top bags for screening. Information identifying the location, sample, and date/time will be inscribed on each jar and zip-top bag.

All sample bags will be screened for metals in accordance with SESD FBQSTP Field XRF Measurement (SESDPROC-107-R2) using a Niton XRF. The sample will be dried before sieving or analysis is performed. Once the sample has dried, the sample will be divided into two subsamples; one subsample will be sieved through a #10 screen (2 mm) and the other will be left unsieved. Once separated into sieved and unsieved samples, the zip-top bag will be compressed by folding over the excess plastic and removing as much air and space from the sample as possible. The XRF will be placed directly on the exterior of the compressed sample in the plastic zip-top bag to measure metals concentrations. Following XRF screening, the unsieved portion of the sample material will be containerized into one 8-ounce jars and the sieved portion of the sample will be containerized into another 8-ounce jar.

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Based on the site DQOs the 8-ounce jars of surface soil and sediment samples should be submitted to PEL, Tampa, Florida (a NELAC certified laboratory) for low level PAH, and/or TCL SVOC, RCRA metals, PCB, and/or Hexavalent Chromium analysis. RCRA metals will be analyzed from both the sieved and unsieved portions of the sample. All other analysis will be conducted on the unsieved portion.

The location of each aliquot will also be logged in accordance with SESD FBQSTP Global Positioning System (SESDPROC-110-R3) using a Trimble GPS.

A description of the color and texture of the aliquot material will be recorded in each box.

The *station ID* for each location will consist of seven characters, beginning with the six digit Property ID designation for the property followed by a alphabetic letter beginning with "A".

e.g. CV0001A would be the station ID for the front yard 5-pt composite sample collected at the property with Property ID CV0001.

The *sample ID* for each sample is the station ID with "CS" (composite soil), "GS" (grab soil), "SD" (sediment), or "SW" (surface water) appended, therefore, the sample ID for this sample would be CV0001A-CS. Co-located duplicates will be designated by appending a "D" to the end of the sample ID. Pan splits will be identified by appending an "SP" to the end of the sample ID.

(b) (6)

STATION ID: 1/POOOS	SAMPLE ID: HP-000 SA -CS
SAMPLE COLLECTION TIME: 0900	
Description of sample location (front, back, side yard; vegetal	ole garden; play set; difch, etc):
Front Yard	
Collection: Composite or Grab	MS/MSD? Y or
Field Duplicate or Split: Yes or No If yes, indicate Duplicate/sp	
GPS Coordinates: Trimble [Instrument #: 0/9 59 5	
Aliquot #1: Latitude: 33.56124253 N La	ongitude 86.79784742 W
Media description: DANK BROWN DAMP	silty soil, coal slag
Aliquot #2 Latitude: 33.56124580 N La	ongitude <u>86.79792540</u> w
Media description: DARK Brown Sting	silty soil
Aliquot #3: Latitude: 33.36 13 2/82	ongitude 86.7978 6804 W
Media description: DARK Brown DAMP 3 Aliquot #4: Latitude: 38.56136973 N Lo	ilfy soil
Aliquot #4: Latitude: 33.56136973 N Le	onginide <u>86.79789047</u> W
Media description: Media descrip	illy soil
Aliquot #5: Latitude: 33 -56 3 6364 N La	ongitude 86.79786053 W
Media description: Damp BARK BROWN	silty soil
STATION ID: <u>HP- 0005</u>	SAMPLE ID: 1-1 P - 000 S R - CS
SAMPLE COLLECTION TIME: 0915	SAMPLE ID: 1-1 P - 000 S & - CS
STATION ID: HP-0005 SAMPLE COLLECTION TIME: 0915 Description of sample location (front, back, side yard; vegetal	SAMPLE ID: 1-1 P - 000 S & - CS
STATION ID: HP-0005 SAMPLE COLLECTION TIME: 0915 Description of sample location (front, back, side yard; vegetal BACK YARD	SAMPLE ID: 1-1 P - 000 S & - CS
STATION ID: HP-0005 SAMPLE COLLECTION TIME: 0915 Description of sample location (front, back, side yard; vegetal BACK YARD Collection: Composite or Grab	SAMPLE ID: HP-0005 p-c5 Ole garden; play set; ditch, etc): MS/MSD? Y or N
STATION ID: HP-0005 SAMPLE COLLECTION TIME: 0915 Description of sample location (front, back, side yard; vegetal BACK YARD	SAMPLE ID: HP-0005 p-c5 Ole garden; play set; ditch, etc): MS/MSD? Y or N
STATION ID: HP-0005 SAMPLE COLLECTION TIME: 0915 Description of sample location (front, back, side yard; vegetal BACK YARD Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Duplicate/sp GPS Coordinates: Trimble [7] Instrument #: 0/8595	SAMPLE ID: 1-1 P - 000 S R - CS Die garden; play set; ditch, etc): MS/MSD? Y or N Logged? O or N
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ADDRESS:	PROPERTY ID:	
DATE:	ARRIVAL TIME:	
Other pertinent information (weat	her conditions, etc.):	
PROPERTY COMMENTS:	· · · · · · · · · · · · · · · · · · ·	
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STATION ID: HP- 0005	SAMPLE ID: _ <i>HP- 00</i> 05C ~	<u>حح</u>
SAMPLE COLLECTION TIME: 0930	_	
Description of sample location (front, back, side y	yard; vegetable garden; play set; ditch, etc):	
GARDEN		
Collection: Composite or Grab	MS/MSD? Y or N	
Field Duplicate or Split: Yes or No If yes, indicate	e Duplicate/split sample station ID:	
GPS Coordinates: Trimble [] Instrument #:	18595 Logged? (Y) or N	
Aliquot #1: Latitude: 33. 5 6142729	N Longitude 86.79777268	W
Media description: Ark Brown	Dung silty soil	
Aliquot #2 Latitude: 33.5614 4277	Dany 3:/ty soil N Longitude 86. 79781879	W
Media description: Danc Brown	- Damp Silty Soil N Longitude 86.79784518	
Aliquot #3: Latitude: 33.56146003	N Longitude 86, 79784518	W
Media description: DAKE Brown	Susure Silly Soil	
Aliquot #4: Latitude:	N Longitude	W
Media description:		
Aliquot #5: Latitude:	N Longitude	W
Media description:		
STATION ID:	SAMPLE ID:	
SAMPLE COLLECTION TIME: Description of sample location (front, back, side y		
Collection: Composite of Grab	MS/MSD? Y or N	
Collection: Composite of Grab Field Duplicate or Split: Yes or No If yes, indicate	MS/MSD? Y or N	
Field Duplicate or Split: Yes or No If yes, indicate	MS/MSD? Y or N	
Field Duplicate or Split: Yes or No If yes, indicate GPS Coordinates: Trimble [] Instrument #:	MS/MSD? Y or N e Duplicate/split sample station ID: Logged? Y or N	
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ADDRESS: (b) (6)	PROPERTY ID: FM-0237
DATE: 12/4/12	ARRIVAL TIME: 1935
Other pertinent information (weather conditions, etc.) Nevcast Mild breeze, mid PROPERTY COMMENTS:	_
Property overgrown, no so with ~35% slope, multi	relating stouctures, On hillside ple aliquots not possible due
Grid for property sketch	4 _N (b) (6)
. AS	» A ³
on ⁴	CHEEK ROAD

STATION ID: FM-0257	SAMPLE ID: FM-0257A-CS
SAMPLE COLLECTION TIME:	
Description of sample location (front, back, side yards	; vegetable garden; play set; ditch, etc):
At toe of hillside	
Collection: Composite or Grab	MS/MSD? Y or 🐼
Field Duplicate or Split: Yes or If yes, indicate Dup	plicate/split sample station ID:
GPS Coordinates: Trimble [Instrument #: 0185	AS Logged? Ø or N
Aliquot #1: Latitude: 33.57025330	N Longitude 36, 80 75 2862 W
Media description + Brown silfy de	ry soil
Aliquot #2 Latitude: 33.57026374	N Longitude <u>86.80754013</u> W
Media description: Lt brown silk	
Aliquot #3: Latitude: 33.57022800	N Longinude 86.80757088 W
Media description: Lt- brown silfe	drysoil
Aliquot #4: Latitude: 33.570/8473	N Longitude 86 80757690 W
Media description: 1+ brown 5/	by dry soil
Aliquot #5: Latitude: 33-570/8697	N Logisitude 86.80 760431 W
Media description: Lt brown silt	dry soil
STATION ID:	SAMPLE ID:
STATION ID: SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard;	
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; Collection: Composite or Grab	vegetable garden; play set; ditch, etc): MS/MSD? Y or N
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dup	vegetable garden; play set; ditch, etc): MS/MSD? Y or N Dlicate/split sample station ID:
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Duplicate or Split: Trimble [] Instrument #:	wegetable garden; play set; ditch, etc): MS/MSD? Y or N plicate/split sample station ID: Logged? Y or N
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SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dup GPS Coordinates: Trimble [] Instrument #: Aliquot #1: Latitude: Media description:	MS/MSD? Y or N Dicate/split sample station ID: Logged? Y or N N Longitude W
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SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Duplicate or Split: Yes or No If yes, indicate Duplicate or Split: Yes or No If yes, indicate Duplicate or Split: Yes or No If yes, indicate Duplicate or Split: Yes or No If yes, indicate Duplicate Output GPS Coordinates: Trimble [] Instrument #: Aliquot #1: Latitude: Media description: Aliquot #3: Latitude:	MS/MSD? Y or N Dicate/split sample station ID: Logged? Y or N N Longitude N Longitude W N Longitude W N Longitude W
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; Collection: Composite or Grab Field Duplicate or Split: Yes or No If yes, indicate Dup GPS Coordinates: Trimble [] Instrument #: Aliquot #1: Latitude: Media description: Aliquot #2 Latitude: Media description: Aliquot #3: Latitude: Media description:	MS/MSD? Y or N Dicate/split sample station ID: Logged? Y or N N Longitude N Longitude W N Longitude W N Longitude W
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ADDRESS: FM 6250
DATE: 12/4/12 ARRIVAL TIME: 1035
Other pertinent information (weather conditions, etc.):
Grid for property sketch (b) (6)
*42 *45 *45 *45 *45

STATION ID: # FM-0750	SAMPLE ID: FUL-02504-CS
SAMPLE COLLECTION TIME: 1115	•
Description of sample location (front, back, side yard;	regetable garden; play set; ditch, etc):
At toe of hillside	
Collection Composito or Grab	MS/MSD? Y or
Field Duplicate or Split: Yes or No If yes, indicate Dupl	cate/split sample station ID:
GPS Coordinates: Trimble [Instrument #: 0185°	Logged? Y or N
Aliquot #1: Latitude: 33-6701 6971	N Longitude <u>86.80757044</u> W
Media description: Lt brown dry Si	
Aliquot #2 Latitude: 33. 570 9266	N Longitude 86.80 761710 W
Media description: Lt brown dry 53	They soil
Aliquot #3: Latitude: 33.57010567	N Longitude <u>86 . 8076 5852</u> W
Media description: Lt brown dry	silty soil
Aliquot #4: Latitude: 33-57002183	_N Longitude _ 86 . 8076 6847 W
Media description: 33.57002183 (brown dry silly soil some clay
Aliquot #5: Latitude: 33.57003687	N Longitude 86.80 770 W
Media description: Life Brown dry	
STATION ID:	SAMPLE ID:
	SAMPLE ID:
SAMPLE COLLECTION TIME:	
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; v	egetable garden; play set; ditch, etc):
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; v Collection: Composite or Grab	egetable garden; play set; ditch, etc): MS/MSD? Y or N
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; v Collection: Composite or Grab Field Duplicate or Split: Yes or No Yyes, indicate Dupli	egetable garden; play set; ditch, etc): MS/MSD? Y or N cate/split sample station ID:
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; y Collection: Composite or Srab Field Duplicate or Split: Yes or No Yyes, indicate Duplicate CPS Coordinates: Trimble [] Instrument#:	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; v Collection: Composite or Srab Field Duplicate or Split: Yes or No Yes, indicate Duplicate Of Scoordinates: Trimble [] Instrument#:	egetable garden; play set; ditch, etc): MS/MSD? Y or N cate/split sample station ID:
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; vertical composite of the state of the sample of the state of the sample of the sam	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N N Longitude W
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; yes) Collection: Composite or Grab Field Duplicate or Split: Yes or No Yes, indicate Duplicate Of Split: Timble [] Instrument#: Aliquot #1: Latitude: Media description: Aliquot #2 Latitude:	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N
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SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; vertical properties of the sample location (front, back, side yard; vertical properties of the sample continuate of the sample location of th	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N N Longitude W
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; ya	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N N Longitude N Longitude W N Longitude W N Longitude W
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; vector) Collection: Composite or Grab Field Duplicate or Split: Yes or No Yes, indicate Duplicate Outpile of No. 10	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N N Longitude W
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; ya	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N N Longitude W
SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; vector) Collection: Composite or Grab Field Duplicate or Split: Yes or No Yes, indicate Duplicate Outpile of No. 10	MS/MSD? Y or N cate/split sample station ID: Logged? Y or N N Longitude N Longitude W N Longitude W

ADDRESS: (b) (6) DATE: 12 4 20 2	PROPERTY ID: _FM - 0204 ARRIVAL TIME:
Other pertinent information (weather conditions, et	
PROPERTY COMMENTS:	d to be
overgroun, with sampled along 318	dense vegatation
sampled along 318	T Place N
aliquot sampled or	7 West of
(b) (6)	
Grid for property sketch	
(b) (6)	B1 B2 3 34 B5
(b) (6)	
	E

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STATION ID: 3154 45th AVE NIZIGHIZ SAMPLE ID: FM -0204 BB 12/4/12 SAMPLE COLLECTION TIME: 15:02
STATION ID: 3154 45th AVE NIZIGIEZ SAMPLE ID: FM - 0204 68 12/4/12
SAMPLE COLLECTION TIME:
Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):
on the side of 31st Place N; west side
Collection: Composite or Grab MS/MSD? Y or N
Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID:
GPS Coordinates: Trimble [Instrument #: 018595 Logged? Y or N
Aliquot #1: Latitude: 33-57630239 N Longitude 86-80493417 W
Media description: Part Brown Fifty Soil with roal frags / dang
Aliquot #2 Latitude: 33,57035694 N Longitude 86,80491494 W
Media description: Dack raddish from 5ilty Goil w/ some Claydam
Aliquot #3: Latitude: 33.57046841 NLongitude, 86.86491092 W
Media description: Light from a fifty with the day f danny
Aliquot #4: Latitude: 33:57045999 N. Longitude 86:80497625 W
Media description: Dark brown fifty foil of some clay of damp
Aliquot #5: Latitude: Sink trans 1/4 N Longitude 86,80493[2] W
Media description: Day to prouve silly soil w/ some clay/damp
STATION ID: FM-0204 SAMPLE ID: FM-0204B-CS
SAMPLE COLLECTION TIME: 15:25
Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc):
on the side of 31st Place N: west side
Collection: Composite or Grab MS/MSD? Y or N
Field Duplicate or Split: Yes or No If yes, indicate Duplicate/split sample station ID:
GPS Coordinates: Trimble [] Instrument #: 018595 Logged? Y, or N
Aliquot #1: Latitude: 33.57049420 N. Longitude 86.80490568 W
Media description: Dark brown, Silty Sail w/ clay
Aliquot #2 Latitude: 33.570.54339 N Longitude 86.80490973 W
Media description: Readish bown Clay uf coal Fragments/damp
Aliquot #3: Latitude: 33.570 59092 N Longitude 86.80491269 W
Media description: Dark brown Silty Soil w/ Some Clay I damp
Aliquot #4: Latitude: 33: \$7064487 N Longitude 86.80491132 W
Media description: light brown Silty Scil of Some Clay 4 coaltragments
Aliquot #5: Latitude: 33.57066993 N Longitude 86-80993459 W
Media description: Dark Diewn Sifty Soil

(b) (6) ADDRESS: FM-0222 8812/4/12 PROPERTY ID: FM-0222 DATE: 12/4/12 ARRIVALTIME: 15:50 (15:50) Other pertinent information (weather conditions, etc.): light rain, overcast PROPERTY COMMENTS: Overgrown, dense vegetation Grid for property sketch . A5

SAMPLE ID: FM-0222A-CS STATION ID: FMI-0222 SAMPLE COLLECTION TIME: __/600 Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): East side of 46th Ave N Collection: Composite or Grab MS/MSD? Y or N Field Duplicate or Split: Yes or W If yes, indicate Duplicate/split sample station ID: Logged? Y or N GPS Coordinates: Trimble [] Instrument #: , 018595 Aliquot #1: Latitude: That boun 5 th 1/4/12 N Longitude 86. 80535355 W Media description: Dark brown Silty Soil of Coal Fragments
Aliquot #2 Latitude: 33.57114919 N Longitude 86.80544348 Media description: Dark brown silty soil Aliquot #3: Latitude: 33.57106586 N Longitude 86.80539550 Media description: Dark brown Sifty Sol Aliquot #4: Latitude: 33.57096381 N Longitude 86.80547731 Media description: Dark breun Silfy Soil Aliquot #5: Latitude: 33.57/03/9/ N Longitude 86, 80535369 Media description: Dark brown Silty Soil STATION ID: SAMPLE ID: SAMPLE COLLECTION TIME: Description of sample location (front, back, side yard; vegetable garden; play set; ditch, etc): Collection: Composite or Grab MS/MSD? Y or N Field Duplicate or Split: Yes or No If yes, in licate Duplicate/split sample station ID: GPS Coordinates: Trimble [] Instrument #: Logged? Y or N N Longitude W Aliquot #1: Latitude: Media description: W Aliquot #2 Latitude: gitude Media description: Aliquot #3: Latitude: N Longitude W Media description: N Longitude Aliquot #4: Latitude: W Media description: Aliquot #5: Latitude: N Longitude W Media description:

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